

Alternative Daily Cover (ADC) Demonstration Project Guidance Stakeholder Workshop

Waste Compliance and Mitigation Program
Monthly Public Meeting

August 9, 2010

Strategic Directive 8.3

Staff review of CalRecycle regulations in light of current science, market issues, & applicable technologies.

Staff developed ADC White Paper in 2009

Board directed staff to develop ADC demonstration project guidance to evaluate newly proposed materials to be used as ADC

Landfill Daily Cover

Operators must cover all disposed solid waste at the end of each day to control odors, vectors, fires, litter, and scavenging.

Minimum of 6" of compacted earthen material or

Alternative cover materials of alternative thickness (ADC) at the end of each operating day

(Title 27 California Code of Regulations Section 20680)

ADC Material Types in Regulation

Title 27 CCR 20690 (b) (1-11)

1. Geosynthetic Fabric or Panel Products (Blankets)
2. Foam Products
3. Processed Green Material
4. Sludge and Sludge-Derived Materials
5. Ash and Cement Kiln Dust Materials
6. Treated Auto Shredder Waste
7. Contaminated Sediment, Dredge Spoils, Foundry Sands, Energy Resource Exploration & Production Wastes
8. Compost Materials
9. Processed Construction & Demolition Wastes & Materials (C&D)
10. Shredded Tires
11. Spray Applied Cementitious Products

If a landfill operator proposes to use an ADC material not included in regulation:

Site-specific demonstration project is required

Operator must complete a successful ADC demonstration project as approved by the Enforcement Agency (EA) with concurrence of CalRecycle

Upon completion of a successful demonstration project, the operator can request the EA to allow the ongoing use of ADC material

Many stakeholders have indicated:

ADC demonstration projects have been dependent primarily on visual observations

No statewide standardized evaluation methodology of ADC demonstrations

Need guidance on how to design & implement ADC demonstration projects

ADC Demonstration Project Guidance

CalRecycle staff, in consultation with LEA's and other stakeholders, are developing a draft ADC demonstration guidance document

Document will assist landfill operators & LEA's in developing, implementing, and documenting ADC demonstration projects

ADC demonstration guidance premises:

Performance of ADC material will be compared to the performance of compacted earthen material (dirt) at the site

If ADC material does not perform as well as the dirt cover at the site, the ADC material would not pass

Evaluate pre-processing, stockpile management, and other activities associated with the use of ADC material

Evaluate greenhouse gas emissions of ADC material compared to dirt cover at the site, including material collection, storage, processing, transportation etc.

ADC demonstration guidance premises

Operator is responsible for:

- developing a proposal
- seeking LEA approval
- implementing & evaluating demo
- submitting final report to LEA

LEA is responsible for:

- reviewing & requesting adjustments to the proposal before approving demonstration
- monitoring the operator's implementation and evaluation methodologies
- conducting direct evaluation of ADC performance if warranted
- reviewing and approving the final report

ADC Evaluation - Flies

Test Methodology

Establish baseline for the site

Fly surveys (Scudder fly grill)

- 10 counts (including crawlers) near attractants on dirt
- 5 highest counts averaged
- species composition survey

Use same methods during ADC use

Performance Evaluation

Fly count ADC / Fly count dirt = 1 or <1

No change in species composition

ADC Evaluation- Odors

Testing Methodology

Establish baseline for site

Phase 1 - Number of confirmed odors utilizing AQMD-type protocols when using dirt

Phase 2 - Return to dirt cover – establish baseline for sources and compounds using odor detection and evaluation technology

Monitor sources and compounds when using ADC

Performance Evaluation

of complaints with ADC / # of complaints with dirt = 1 or <1 (Phase 1)

If >1, then compare source and characteristic with baseline (Phase 2)

If ADC is source and compounds are odorous, then ADC fails odors evaluation

Next Steps

- Input on premises
- Complete draft guidance
- Review and comment on draft guidance
- Pilot guidance
- Finalized guidance

Comments & Suggestions

Ken.Decio@CalRecycle.ca.gov

(916) 341-6313